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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,406	08/22/2003	Tsung-Liang Lin	JCLA10428	9248
23900	7590	11/24/2006	EXAMINER	
J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618			DEPPE, BETSY LEE	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 11/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/646,406	Applicant(s) LIN ET AL.	
	Examiner Betsy L. Deppe	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. The abstract of the disclosure is objected to because it refers to purported merits of the invention (e.g. ensuring communication link and increasing throughput of transceiver) and is not a concise statement of the technical disclosure. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:
- a. on page 1, line 8, "April 25. 2003" should be "April 25, 2003"; and
 - b. on page 2, lines 17 and 18, it is unclear what is meant by "complicatedly."
- Appropriate correction is required.

Claim Objections

4. Claim 9 is objected to because of the following informalities: on line 17, "pluses" should be "pulses". Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 5, 7-10, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al. (US Patent No. 5,930,295) in view of Robinson et al. (US Patent No. 5,943,290).
7. With regard to claims 1 and 9, Figure 1 of Isley, Jr. et al. discloses the claimed invention including a medium within which a communication signal propagates through (14), an analog circuit (e.g. any of the components that are part of 18), a digital circuit (20), an analog interface circuit (28) and a digital interface circuit (34). (See column 2,

line 42- column 3, line 13 and column 4, lines 20-41) However, Isley, Jr. et al. does not disclose a first ground reference, a second ground reference, and a joint clock source.

Figure 1 of Robinson et al. discloses an integrated circuit with a clock source that provides signals to an analog circuit (12) and a digital circuit (14) wherein the analog circuit has a first ground reference (AGND), the digital circuit has a second ground reference (DGND) and the joint clock source connected to the first ground reference (see Figure 4). (See column 1, lines 19-23; column 2, lines 1-26; column 3, lines 63-67; and column 4, line 65 - column 5, line 3) Since it is implicit that the transceiver/modem of Isley, Jr. et al. requires clocking signals, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robinson et al. with Isley, Jr. et al. by implementing the transceiver of Isley, Jr. et al. as an integrated circuit with the separate ground references as taught by Robinson et al. in order to reduce the size of the transceiver while minimizing the noise between the digital and analog portions of the integrated transceiver circuit.

8. With regard to claims 2 and 10, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including an antenna and propagating the signal through the air. (See Isley, Jr. et al., "14" in Figure 1)

9. With regard to claims 4 and 12, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a crystal oscillator as the joint clock source. (See Robinson et al., column 3, lines 63-67)

10. With regard to claims 5 and 13, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a switch (36), a downconverter (26), an upconverter (32) and a synthesizer (24). (See Isley, Jr. et al., Figure 1)
11. With regard to claims 7 and 15 Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including an analog-to-digital converter. (See Isley, Jr. et al., "28" in Figure 1)
12. With regard to claims 8 and 16, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a digital-to-analog converter. (See Isley, Jr. et al., "34" in Figure 1)
13. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al in view Robinson et al. as applied to claims 1 and 9, respectively, above, and further in view of Hoobler (US Patent No. 7,130,337 B2). Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention except for propagating the communication signal through a wire.

Hoobler discloses that modems may be used in RF (i.e. over the air) systems or in power line systems (i.e. over a wire). (See column 3, lines 62-63) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention disclosed by Isley, Jr. et al. in view of Robinson et al. in order to reduce noise of modems in wired communication systems. Whether the modem is implemented in a RF or wired communication system does not affect the functionality or operability of the modem.

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14. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al in view Robinson et al. as applied to claims 1 and 9, respectively, above, and further in view of Sorrells et al. (US Pub. No. 2004/0013177 A1). Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a baseband processor for digital signal processing. (See Isley, Jr. et al., Figure 1, "20"). However, Isley, Jr. et al. in view of Robinson et al. does not teach a MAC unit.


Figure 3B of Sorrells et al. shows an integrated transceiver (322) interfacing with a MAC unit (112). Since the protocol or standard to the communication system does not affect the functionality or operation of the integrated transceiver circuit, it would have been obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to implement the method or circuit disclosed by Isley, Jr. et al. in view of Robinson et al. in a system that operates in accordance with such as IEEE 802.11 standards in order to optimize the performance of such a system by reducing noise caused by an integrated transceiver. Furthermore, in order for the integrated transceiver circuit to properly interface with controller of such a system, it is implicit that a MAC unit must be connected to the integrated transceiver circuit. (See Sorrells et al., paragraphs [0045]-[0046])

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Betsy L. Deppe
Primary Examiner
Art Unit 2611